[0061] According to one aspect, there is provided a touch screen display unit. The touch screen display unit includes a base, a display device connected to the base and moveable relative to the base, a touch-sensitive input surface overlying the display device for determining a touch event thereto, and a shape memory alloy disposed between the base and the display device, the shape memory alloy configured for shrinking in response to conduction of electric current to cause movement of the display device relative to the base. The touch event causes conduction of electric current through the shape memory alloy, resulting in movement of the display device and touch-sensitive input surface relative to the base

[0062] According to another aspect there is provided an electronic device. The electronic device includes a base, a touch screen display, a shape memory alloy and operational components. The touch screen display is connected to the base and moveable relative to the base and includes a display device and a touch-sensitive input surface overlying the display device and connected to a controller for determining a touch event to the touch-sensitive input surface. The shape memory alloy is disposed between the base and the display device and is configured to change shape in response to conduction of an electric current to cause movement of the display device relative to the base. The operational components include a processor between the base and the touch screen display. The processor is operatively connected to the controller, the display device and the shape memory alloy for causing conduction of current through the shape memory alloy in response to the touch event, resulting in movement of the touch screen display relative to the base.

[0063] According to yet another aspect, there is provided a method of controlling an electronic device. The method includes receiving a touch input at touch screen display, determining a location of the touch input on the touch screen display, and causing current conduction through a shape memory alloy disposed between a base and the touch screen display of the electronic device in response to receipt of the touch input. The current conduction results in a change in shape of the shape memory alloy to cause movement of the touch screen display relative to the base.

[0064] While the embodiments described herein are directed to particular implementations of the portable electronic device, it will be understood that modifications and variations to these embodiments are within the scope and sphere of the present application. For example, the size and shape of many of the features of the portable electronic device can differ while still providing the same function. Many other modifications and variations may occur to those skilled in the art. All such modifications and variations are believed to be within the sphere and scope of the present application.

What is claimed is:

1. A touch screen display unit comprising:

a base;

a display device connected to the base and moveable relative to the base;

a touch-sensitive input surface overlying the display device for determining a touch event thereto; and

a shape memory alloy disposed between the base and the display device, the shape memory alloy configured to change shape in response to conduction of electric current to cause movement of the display device relative to the base,

wherein the touch event causes conduction of electric current through the shape memory alloy, resulting in movement of the display device and touch-sensitive input surface relative to the base.

2. The touch screen display unit according to claim **1**, wherein the shape memory alloy is configured to shrink in response to conduction of electric current therethrough.

3. The touch screen display unit according to claim **1**, comprising a controller for determining a location of the touch event.

4. The touch screen display unit according to claim **1**, wherein the shape memory alloy comprises a muscle wire.

5. The touch screen display unit according to claim **1**, wherein the shape memory alloy comprises a plurality of spaced apart wires disposed between the base and the display device, each of the wires configured for shrinking in response to conduction of electric current through respective ones of the wires to cause movement of the display device and touch-sensitive input surface relative to the base.

6. The touch screen display unit according to claim **5**, wherein the touch event causes conduction of electric current through at least one of the wires based on a location of the touch event.

7. The touch screen display unit according to claim **6**, wherein a respective one of the plurality of wires is located proximal each of four corners of the display device.

8. The touch screen display unit according to claim **7**, wherein electric current is conducted through each of the plurality of wires located proximal each of the four corners of the display device in response to the location of the touch event being proximal a center of the touch sensitive input surface.

9. The touch screen display unit according to claim **5**, wherein each of the wires are coil-spring shaped.

10. The touch screen display unit according to claim **1**, comprising a frame spaced from the base by intermediary sidewalls and framing the display device and touch-sensitive input surface.

11. An electronic device comprising:

a base;

a touch screen display connected to the base and moveable relative to the base, the touch screen display comprising a display device and a touch-sensitive input surface overlying the display device and connected to a controller for determining a touch event to the touch-sensitive input surface;

a shape memory alloy disposed between the base and the display device, the shape memory alloy configured to change shape in response to conduction of an electric current to cause movement of the display device relative to the base;

operational components including a processor between the base and the touch screen display and operatively connected to the controller, the display device and the shape memory alloy for causing conduction of current through the shape memory alloy in response to the touch event, resulting in movement of the touch screen display relative to the base.

12. The electronic device according to claim **11**, wherein the shape memory alloy is configured to shrink in response to conduction of electric current therethrough.

13. The electronic device according to claim **11**, wherein the shape memory alloy comprises a muscle wire.